



MINISTRY OF
**HEALTH &
WELLNESS**

NATIONAL SCHOOL NUTRITION STANDARDS



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Introduction and Background

The development of school nutrition standards in Jamaica was conducted in the context of rising levels of overweight and obesity in Jamaican children coupled with evidence of unhealthy diets and inadequate physical activity (1,2). These trends have prompted a range of policy and programme interventions in Jamaica aimed at addressing the main contributory factors while at the same time providing the framework for developing supportive school environments that will support long term behaviour change in school aged children.

The World Health Organization has been in the forefront of reviewing and documenting evidence relating to the linkages between lifestyle and the risk for the development of Non Communicable Diseases (NCDs) in adults and children and has published strong evidence to support the connection between consumption of unhealthy diets (high in fat, sugar and salt and low in fibre, fruits and vegetable) as well as low levels of physical activity, and the increased risk for NCDs. Excess alcohol consumption and smoking have also been identified as strong risk factors for NCDs.

Policies and programmes designed and implemented within the context of comprehensive School based diet and physical exercise policies have been shown to be effective in supporting the adoption of healthy diets and physical activity habits. This is in part due to the fact that the school environment is regulated and can therefore, through appropriate policy implementation exert positive influence on the lifestyle choices in the areas of diet and exercise of most children.

The evidence suggests that multi-component school based interventions that include *inter alia* changes in curriculum as well as supportive school environment policies, availability of healthy food options and structured physical activity programmes can form the basis for the inculcation and eventual adoption of healthy lifestyle behaviours. (3)

The Government of Jamaica has embarked on a comprehensive programme to address the negative nutrition and lifestyle related trends that are being manifested in school aged children, including a comprehensive health promotion initiative aimed at sensitizing the population at large about the importance of healthy lifestyle choices and ultimately targeting appropriate behaviour change with respect to food choices and physical activity.

Development of a National School Nutrition Policy was spearheaded by the Ministry of Education Youth and Information, includes School Nutrition Standards and is one such intervention aimed at reducing the prevalence of Non-Communicable Diseases in Jamaica.

Development of the National School Nutrition Standards which will support the implementation of the School Nutrition Policy was led by the Ministry of Health using a consultative process. These standards are based on the Food Based Dietary Guidelines for Jamaica and evidence-based recommendations from regional and international health agencies and will provide guidance on the nutritional profiles of healthy meals, snacks and beverages i.e. Meals, snacks and beverages that are:

- Low in salt/sodium
- Low in added sugar and sweeteners
- Free from industrially produced trans fats
- Inclusive of fresh or minimally processed fruits and vegetables
- Inclusive of peas, beans and nuts
- Appropriate with respect to fat content

All standards contained herein will be in addition to all existing legislation governing the production, labelling, sale and distribution of foods and beverages in Jamaica.

Objectives of School Nutrition Standards

1. To define the types of foods and beverages which are restricted, in order to replace food high in fat, sugar and salt with more nutritious food and drinks.
2. To ensure nourishing food is served more frequently.
3. To ensure improvement in the nutrient quality of school meals, allowing time for the more detailed process of developing meals that meet the new nutrient-based standards.

Scope of the Standards

The standards will be applicable as follows.

Where: Public Early Childhood Institutions, primary and secondary institutions -Including:

- The school compound
- The immediate vicinity of the school – within 200m of the school perimeter
- Sporting events and competitions at schools
- School fundraisers
- School recreational activities e.g. concerts, fairs, barbecues etc. held on the school premises

Who: All providers of meals and non-meal items (snacks and beverages) – canteens, concessionaires, vendors including parents/ guardians, teachers and school administration, and students who may provide food items for sale in schools

Boundaries of the school environment: Immediate vicinity of the school i.e. against the school boundary

When: School days (Mondays- Fridays), during school hours and special school activities,

What: all food items within the specified boundary

Exemptions to the Standards

Food and drink brought by students from home for their own consumption will be exempt. This will accommodate students with special dietary requirements.

Exceptions to Nutrient Standards

Possible exemptions may include Cultural days (e.g. Jamaica Day) where specific foods by their nature and or recipe content, breach the nutrient guidelines.

Sports drinks (electrolyte and or glucose replacement drinks) are permitted for use, but only by athletes during training and competition.

Provision of specially formulated meals or beverages which fall outside the meal and nutrient standards outlined herein, must only be carried out under the advice of a qualified medical professional (e.g. medical doctor, nutritionist, dietitian) and after nutrition assessment. Extended use must be accompanied by routine follow-up assessments.

Proposed Standards Cooked meals

The standards will apply to all food and drink items available to children within the school environment whether prepared on or offsite.

Below are the proposed nutrient and meal standards which will be applicable in schools by age group:

Two meal sizes:

- Large for age group 10 – 18 yrs
- Small for age group 4 – 9 yrs
- Meals are planned to provide 30% of the Recommended Daily Allowance (RDA). This is based on an adjusted Caribbean RDA which has been used as the reference document. (4)
- Meals are planned to provide 50% Vitamin C and Iron to combat the prevalent and persistent problem of anaemia. (4)
- An iron rich food should be included at least 3 times each week.
- Plant based proteins such as peas and beans should be promoted and included as an option at least 2 times per week

*Each meal will provide:
465-670 kcal of energy
6-14 grams of protein
39 grams of carbohydrates
15-22 grams of fat
15 - 20 mg vitamin C
3-10 mg iron*

Summarized Meal Standards for Cooked Lunch

GUIDELINES TO PREPARE MEALS

Summarised Meal Standards for Cooked Lunches

Food	Small Lunch	Large Lunch
Meat or Meat Substitute (such as beans/ legumes)	3 oz (~85 grams)	4 oz (113 grams)
Staple Rice or pasta Ground provision	1 cup (~113g-170g) 4 oz-6oz	1.5 cup (~170g – 255g) 6oz- 9oz
Vegetable	1 cup	1 cup
Fats and Oils	1 tsp	1 tsp

Safe water should be made available for consumption at meal times, as well as throughout the day to facilitate adequate fluid intake.

Reference Documents for the Preparation and service of cooked meals in schools

Standardised Recipes are available in the *Recipe Manual - School Feeding Pilot Region 1, Ministry of Education, January 2014*. This manual provides guidance on the production of standardized meals to children in infant, primary and secondary schools. It details recipes for a three-week cycle menu of five days per week. A ten-day vegetarian menu and a five-day emergency menu are also included.

Standards for Processed and/ or Ultra-Processed Pre-Packaged foods and Beverages

The PAHO Nutrient Profile model (3) forms the basis for the definition of standards for non-meal offerings in schools. The Nutrient Profile Model classifies processed and ultra-processed food and drinks products that are in excess of nutrients such as sugars, salt, total fat, saturated fat and trans-fatty acids. The rationale for the focus on these nutrients is based on review of evidence linking the nutrients to the detrimental public health trends. The profile recommends maximum acceptable levels of nutrient content developed after analysis of evidence which links nutrient intake to public health outcomes.

Other sweeteners are also included in the model because evidence suggests that regular use of other sweeteners predispose children to increased consumption of foods and drinks with high sugar content. This category does not include fruit juices, honey or other food ingredients that can be used as a sweetener.

The summary of the critical nutrients included in the Profile and which will be included in the Jamaica School Nutrition Standards are set out below in Table 1 abstracted from the PAHO Profile.

Table 1

Nutrient standards for snacks and non-meal foods (adapted from the PAHO Nutrient Profile Model)

Sodium	Free sugars	Other sweeteners	Total fat	Saturated fat	Trans fat
≤1 mg of sodium per 1 kcal	≤10% of total energy from free sugars	Any amount of other sweeteners	≤30% of total energy from total fat	≤10% of total energy from saturated fat	≤1% of total energy from trans fat

Examples of the relevant foods are provided in the Model and include *inter alia*:

“Processed products: fruits in sugars and candied fruits; canned sardine and tuna; breads and baked products (in general).

Ultra-processed products: Sweet or salty packaged snacks, biscuits (cookies), ice cream, and candies and confectionery (in general); sweetened breakfast cereals; cakes and cake mixes and cereal bars;

sweetened and flavored yogurts; canned, packaged, dehydrated, and other “instant” soups, noodles, pre-prepared meat, fish, vegetables, pizza and, burgers, hot dogs, sausages, poultry and fish “nuggets” and “sticks”, and other products made from animal byproducts”. (3)

Foods that are not included in the restrictions above include fruits and vegetables that occur in their natural states, or that have undergone minimal processing as well as freshly prepared dishes and culinary ingredients.

Beverage Standards for Schools

The main objective of these standards is to limit the amount of total sugar in sweetened beverages, which are available or served in schools. The implementation schedule is set out below

Sugar Content	Implementation Date
Maximum 6g/100ml	effective Jan 1, 2019
Maximum 5g/100ml	effective Jan 1, 2020
Maximum 4g/100ml	effective Jan 1, 2021
Maximum 2.5g/100ml	effective Jan 1, 2023

Prohibited Beverages

In line with the implementation schedule, beverages that are prohibited are as follows:

- Sweetened beverages that are in excess of the prescribed sugar limit, including but not limited to:
 - carbonated beverages (such as regular soda), that are in excess of the prescribed sugar limit
 - fruit flavoured drinks, that are in excess of the prescribed sugar limit
 - coffee and tea beverages that are in excess of the prescribed sugar limit
 - sweetened waters, that are in excess of the prescribed sugar limit
- Energy drinks and other beverages with caffeine content more than 40mg caffeine per serving
- Beverages containing artificial sweeteners. The use of artificial sweeteners is not recommended for prolonged consumption by children

Permitted Beverages

- Plain water
- Unsweetened flavoured and infused water
- Unsweetened juices
- Unsweetened coconut water
- Unsweetened milk or milk products
- Unsweetened milk substitutes and milk substitute products
- Sweetened beverages (including flavoured and infused water) below the prescribed sugar limit
- Sports drinks (Electrolyte and glucose replacement drinks) – reserved **only** for athletes during training and competition.

These guidelines for beverages will be implemented within the context of appropriate labelling of products based on the relevant Food and Drug Regulations 1975 and its relevant amendments and guidance on the use of Artificial sweeteners.

Additional recommendations (based on USDA guidance for children less than 18 years) also include:

1. Caffeine content: Recommended - <10mg per serving.
2. Package size: Recommended - <12 ounces for all beverages except water

Therapeutic and Meal Replacement Beverages

The beverage standards do not apply to therapeutic beverages, and liquid meal replacements. Therapeutic beverages, and liquid meal replacements should not be sold to the general school population. If supplied by the school, it should be based on the recommendation of a qualified medical professional after nutritional assessment. The use of the product should also be accompanied by routine monitoring of the health status of the consumers. This also applies to any supplementary feeding programme, for example, athletic or student welfare.

The Food Service Environment

School nutrition standards are closely linked with the quality of the overall food service environment in schools. Guidelines/assessment instruments related to the standards for the food service environment are set out in Appendix 1 and cover the areas set out below.

- Guidelines for Procurement/Purchasing
- Guidelines for Receiving foods
- Guidelines for Storage of Foods
- Guidelines for Ordering and Issuing
- Guidelines for the Production and Service of Meals
- Food Safety Guidelines for Service
- Guidelines for Record Keeping
- Sanitation
- Personal Hygiene (staff/employees)
- Pest Control
- Garbage Disposal
- Floor & Equipment Cleaning and Sanitizing

Marketing Standards

In order to protect the health of the children, it is well documented that a critical element in facilitating appropriate changes in food consumption habits in school aged children is the development of standards relating to the marketing of food in the school environment.

The school environment includes:

1. The school compound
2. The immediate vicinity of the school
3. Events where school aged children gather
 - a. Sporting events and competitions for schools

- b. School fundraisers
- c. School recreational activities e.g. concerts, fairs, barbecues etc.

Marketing efforts which should be prohibited in the school environment include:

1. Promotion of brands associated with products which are high in salt, fat or sugar including:
 - a. Mascots
 - b. Sales/ special sale promotions
 - c. Giveaways
 - d. Branding on posters
 - e. Branding on textbooks, exercise books and other school supplies
2. Sponsorship (by brands associated with products which are high in salt, fat or sugar) of
 - a. Equipment and materials including learning/ teaching aids
 - b. Teams, uniforms and other apparel
 - c. Events, competitions
 - d. Buildings, rooms, facilities
 - e. Services
3. Philanthropic activities tied to brands associated with products which are high in salt, fat or sugar
 - a. Health and wellness campaigns
 - b. Scholarships/ funds/ grants for schools or students
 - c. Food or feeding programmes

APPENDIX 1

Guidelines for Procurement/Purchasing

- Purchase foods in keeping with the written menu.
- Compile food items into a commodities list or form.
- Adjust recipes to determine the total quantity of each food item to be purchased
- Use guidelines provided to determine how often a particular food item must be purchased.

Guidelines for Receiving foods

It is recommended that a senior teacher or the School Feeding Coordinator should be the person responsible for this aspect. They should ensure that foods are fresh and safe when they enter the foodservice operation and accept only the products that meet specifications, quality standards, and sanitation requirements. Foods should be transferred to proper storage as quickly as possible.

- Organize the physical space used for receiving. Have available:
 - A clean basket, cart or hand truck for transporting goods from the receiving area to storage.
 - A copy of purchase order ready when the delivery is scheduled.
 - A product specification list.
- Inspect goods received against purchase order, invoice and purchasing record form
- Verify weights and counts on both the purchase order and invoice.
- Examine foods for colour, texture, odour, presence of cuts, bites, tears/rips, dents, bulges and expiration dates.
- Certify that the quantity of goods was received and in good condition.
- Refuse goods/supplies in poor condition, or if the items were not ordered, price was not what was quoted or the goods/supplies were not received on a timely basis.
- Place goods in respective storage area immediately using the first in first out (FIFO) system.

Food Safety Guidelines for Receiving

- Keep the receiving area well lit and clean to discourage pests.
- Mark all items for storage with the date of arrival or the “use-by” date.
- Check to be sure shelf dates have not expired and will not expire before use. Check expiration dates of milk, and other perishable goods.
- Make sure frozen foods are in airtight, moisture-proof wrappings. Reject foods that have been thawed and refrozen. Signs of thawing and refreezing include large ice crystals, solid areas of ice, or excessive ice in containers.
- Reject cans that have any of the following signs of deterioration: swollen sides or ends, flawed seals or seams, dents, or rust.
- If available use a food thermometer to check the temperature of refrigerated and frozen foods including dairy products, fresh meat, fish, and poultry products.
- Examine packaging for content damage and insect infestations.
- Remove empty containers and packing material immediately to a separate trash or recycling area.

Guidelines for Storage of Foods

Space should be available for the storage of perishable and non-perishable foods and supplies. While this space may be shared with another department, a location reasonably close to the kitchen and service areas reduces transportation time and must allow for seclusion of food items. Storage activities and access to storage must be assigned to one specific individual to ensure control over the goods in storage.

- Good ventilation is essential to retard growth of various bacteria and molds, prevent mildew and rusting of metal containers, and minimize caking of ground or powdered foods. Water heaters, compressors, motors, or other heat-producing equipment should not be located in the storeroom.
- To prevent access by rodents and insects, floors, walls, and ceilings should be smooth, moisture-proof, and free from cracks.
- Ensure adequate for good housekeeping and inventory control.
- Install a security sash, screen, or bar on windows in storerooms located at ground level.
- Provide a separate storage area for: cleaning supplies; chemicals; paper goods and other non-food materials

Dry Storage

- Arrange goods according to the First in, First out (FIFO) method of issuing (stock rotation).
- Store goods such as flour, rice and sugar in bins with tightly fitted lids on pallets. These bins must be replaced as necessary.
- Store canned items and food items in small containers on shelves (not wood) at least 6 inches from the ground and 6 inches away from the wall.
- Check goods periodically for signs of spoilage such as bulging or leaking cans.
- DO NOT store cleaning supplies and paper in dry storage area with food items.

Cold Storage

- Store all perishable foods either in refrigerator or in frozen storage immediately upon receipt and keep under these conditions until ready for use.
- Refrigerator storage temperature must be less than 4°C (40°F) to be suitable for storage of fruits, vegetables, and most other perishable products.
- Remove heavy wrapping paper from foods that are to be refrigerated to allow cold air to circulate through the food.
- Store/arrange foods using the First-in First-out (FIFO) method.
- Refrigerators MUST NOT BE overcrowded but must allow space between items to allow for cold air to circulate.
- Raw and cooked foods MUST BE stored separately if possible, or store cooked foods above raw foods in the same refrigerator.
- Milk, meat and drinks must be stored separately.
- All food items such as canned foods MUST NOT BE stored in their containers after being opened.
- Shelves and interiors of refrigerators MUST BE clean and free from debris and excess moisture.
- Hot foods must be cooled rapidly in an ice water bath (container with ice and water) before storing in refrigerator or freezer.
- Refrigerator doors MUST BE kept closed except when removing or putting in foods.

- Freezer storage temperature -18°C (0°F). Foods for storage in freezers are meat seafood and poultry.
- Frozen foods **MUST BE** securely packaged to prevent freezer burns.
- Foods slated for freezers **MUST BE** labeled and dated prior to storage
- The temperature of the refrigerators should be monitored twice daily at the beginning of the work day and at the end of the work day and recorded.

Guidelines for Ordering and Issuing

The number of meals to be prepared and the quantity of food items required for preparation should be based on a count of the number of students that will be requiring meals on a daily basis.

Ordering

Set out below are recommended procedures for implementing a system for the ordering of lunches. Please refer to the Guidelines for Using and Administering the PATH Nutritional Subsidy for further guidance on the recommended procedures and practices in this area especially as it relates to the maintenance of records for PATH beneficiaries.

- Post weekly menu in the classroom or canteen on Friday after lunch.
- Inform students each day of the menu for the following day.
- Document the number of children requiring meal for each class in the meal register. This should be collated the evening before and sent to the canteen.
- Confirm the number of students for meals each day.
- The total number of students requiring meals each day should be collated from the daily request form.
- Adjust recipes based on orders received
- Order the requested amount of each food item based on the adjusted recipes

Issuing

- Issuing must be done based on the menu requirement
- The quantity issued must be based on the number of meals ordered.
- Issuing must be done at least a day ahead to allow for pre-preparation
- The First In First Out (FIFO) method of issuing must be used to ensure the quality of foods being used for each menu item

Production of Meals

In order to maintain nutrient standards, the recipe manual should be used for the preparation of all menu items.

Guidelines for Pre-Preparation

- Pre-preparation must be done ahead of scheduled preparation based on number of students having lunch.
- Review menu
- Gather and read all recipes
- Requisition foods from stores based on diet scale ahead of preparation time
- Assemble all ingredients for each recipe as per menu
- Thaw meat in refrigerator or under cold running water

- Start pre-preparation by cleaning, trimming and cutting food item into appropriate portion size
- Season meat and other food item appropriately
- Store prepared ingredients in appropriate containers, label and refrigerate.

Guidelines for cooking the meal

- Use recipes provided for each menu item being prepared. This is to ensure that nutrient standards are being maintained.
- Proper measurements must be done to ensure accuracy. For example, level instead of heaped.
- Read scale and cups appropriately.
- Use the correct utensil example, liquid cup for liquid measures only; dry cups for dry measures.
- Review the cooking methods specified in the recipes and follow instructions carefully.
- Follow the cooking method as it will affect the quality and quantity of the meal.
- Begin the cooking process starting with food items which will take longest time to prepare.
- Cook vegetables as close to serving time as possible.
- Serve meals on the same day within an hour of cooking or completion.

Food Safety Guidelines for Pre- preparation & Cooking

There are several cautions for food handlers because pre-preparation usually takes place at room temperature. This stage is one of the most common points of contamination and cross-contamination:

Pre Preparation

- Wash hands correctly before beginning preparation.
- Prepare foods no further in advance than necessary.
- Prepare foods in small batches and place in cold storage immediately. This will prevent holding food too long in the temperature danger zone.
- Always hold prepared cold foods at or below 4°C (40°F).
- Wash fresh fruits and vegetables with cold, running drinkable water to remove surface pesticide residues and other impurities, such as soil particles; wash regardless of whether the produce will be served whole, peeled, or cooked.
- Use a brush to scrub thick-skinned produce.
- Avoid cross-contamination.
- Keep raw products separate from ready-to-serve foods.
- After each contact with a food, wash, rinse, and sanitize cutting boards, knives, equipment, and all other food contact surfaces. Wash hands.
- Follow equipment manufacturer's directions and standardized recipes to avoid overloading baking pans.

Cooking

- Stir foods cooked in deep pots frequently to ensure even distribution of heat and thorough cooking.
- Avoid overloading fryers. Allow the oil temperature to return to the required level between batches.

- Regulate size and thickness of each portion to make cooking time predictable and uniform. Cook similar sized portions together.
- Never interrupt the cooking process. Partially cooking poultry or meat, for example, may produce conditions that encourage bacterial growth.
- It is best to use a thermometer to monitor the accuracy of heating equipment.
- If available also use a food thermometer to check that food reaches the required safe internal temperature during cooking. Check food temperature in several places, especially in the thickest parts, to make sure the food is thoroughly cooked. To avoid getting a false reading, be careful not to touch the pan or bone with the food thermometer.
- Always cook food to the required safe internal temperature and appropriate time.
- Use a serving utensil or single-use glove to avoid cross-contamination.
- Taste foods correctly to avoid cross-contamination. Place a small amount of food from the food container into a small bowl, step away from the food container, and taste the food with a teaspoon. Remove the used bowl and teaspoon to the sink for washing. Never reuse a bowl or spoon already used for tasting. Wash hands after tasting.
- A small portion of all menu items served daily should be collected in individual sterile containers, labelled, dated, and refrigerated for at least three (3) days, for possible testing in the event of food borne illness. These containers ARE NOT reusable

Meal service

The completed dishes/menu items for the school feeding programme should be served with the food items appropriately arranged in the plate or serving container and attractively garnished if necessary.

Guidelines

- A Service and distribution area should be identified at each school. This area must be made ready prior to meal service each day.
- Set up service area before the food is removed from the cooking range, oven or refrigerator.
- Clean and sanitize all serving areas.
- Ensure adequate serving utensils.
- Ensure that all eating areas are clean
- Equipment should be arranged prior to the start of service these include:
 - Holding equipment/area for meals
 - Standard portioning equipment
 - Trays and tray covers
 - Regular eating ware or disposable boxes, forks and/or spoons
- Ensure correct and consistent size for each portion of each menu item.
- Review the lunch register for number of meals to be served. Make special notation of the number of small and large meal sizes required.
- Encourage children to clear refuse from plates before stacking plates.
- Soils from table and emptying must be done promptly.
- Where disposables are used, a lined leak proof bin/drum must be placed in areas to receive disposables. Prompt clearing of bin/drum must be done to prevent over flow.

Food Safety Guidelines for Service

- The food being served should not come in contact with:
 - Hand
 - Body
 - Clothes
 - Surrounding e.g. counters, floors
 - Other utensils
 - Raw or other unprepared foods
- Always keep HOT foods in hot holding equipment at or above 60°C (140°F); and
- Always keep COLD foods in a refrigeration unit or surrounded by ice at or below 4°C (40°F).
- Stir foods at reasonable intervals to ensure even heating or cooling.
- Do not add partially cooked food items to containers containing fully cooked foods awaiting service.
- Leftovers should not be stored and used in the feeding programme. Each day a new menu is prepared to ensure the provision of a variety of nutrient sources to students.
- Always wash hands and arms up to the elbow with soap and water before serving food.
- Use cleaned and sanitized long-handled ladles and spoons so bare hands do not touch food.
- Avoid touching the parts of plates, glasses, food trays, or flatware that will come into contact with food or the customer's mouth.
- Use lids/food covers to protect prepared food from contamination.
- Always clean and sanitize food preparation areas and equipment between food preparation tasks. For example, do not reuse a serving pan used to hold raw chicken to serve the same chicken after it has been cooked unless the pan has been thoroughly cleaned and sanitized.
- Throw away garnishes used on pans on the service line after each meal.

Recommended Guidelines for Record Keeping

Inventory management

An inventory of all commodities received from the Ministry of Education, companies or bought from vendors must be recorded using records/forms specified by the Ministry of Education for this purpose.

Stock record

- Stock records should be maintained. These records should give details of the movement of the major commodities in storage. It should show:
 - Stock received
 - Stock issued
 - Spoilage
 - Stock balance

Ordering and Issuing

- A meal or lunch register should be used to record the information on the meals ordered by students.
- The meal register should have the students' name and the day of the week. A mark (✓) will indicate students having meal and (X) will indicate students not having meal.
- At the end of each day an inventory of stock on hand must be carried out using the appropriate inventory form

Menu record

This record should give details of the meal/s provided on a daily basis. It should also state the quantities of the various commodities used, the number of lunches served detailing the number of students who had paid, the number of free lunches given to needy students as well as the members of staff who had purchased lunches.

Production of Meals

In addition to the menu items prepared for the day's meal, the number of meals prepared and the quantity of food items used should be recorded daily for each meal.

Refer to the Ministry of Education Guidelines for the Operations of Tuck Shops and Canteens in Public Educational Institutions for sample forms that should be used in the above areas

Sanitation

A schedule must be developed in accordance with the Public Health Inspector for random spot checks of all facilities each term. A schedule must be established for the cleaning and sanitizing of the facility and equipment.

Personal Hygiene (staff/employees)

- All persons involved in food production and distribution must have valid food handler's certificates prior to employment and a system must be developed for annual re-certification.
- Employees must wear clean clothes and aprons or smock daily. Clothing should be made from cotton material. Armpits should be covered, flat shoes must be worn, and no slippers or open toe shoes should be worn in the foodservice establishment.
- Hair restraint must be worn to effectively cover head. Facial hair must also be covered with appropriate restraint.
- Jewelry must not be worn while on the job as they are havens for bacteria and can contaminate food.
- Fingernails must be trimmed, short and free from nail polish.
- Hands must be kept away from face, hair, mouth and nose.
- Smoking is not allowed in the foodservice establishment.
- Hands must be washed before beginning work or before returning to work, following a break and after carrying out the following activities:
 - After defecating, urinating, scratching or other contact with the body, body fluids or discharges.
 - After coughing, sneezing using a handkerchief or disposable tissue.
 - After smoking, using tobacco, eating or drinking.
 - After handling soiled equipment or utensils.
 - Immediately before preparation, such as working with food, clean equipment or supplies.
 - When switching from working with raw food to cooked food.

Proper Hand Washing Procedures

1. Wet hands with water; soap properly; soap back of hands, between fingers and up to elbows.
2. Scrub properly using a brush reserved for nails. Rinse.
3. Soap and rinse the pipe tap
4. Re-soap hands up to elbow and rub, for about 20 seconds.

5. Rinse properly under running water or fresh clean water in a clean basin.
6. Dry hands, using disposable towel.

Other Personnel Hygiene Factors

- All food handlers must have a valid food handlers certificate
- No unauthorized persons should be allowed in the food preparation area.
- All cuts and abrasions must be covered with water proof bandage
- Cuts on hands must be covered with water proof bandages and a water tight disposable glove
- Employees with any symptoms of vomiting, diarrhoea, fever, cold or sore throat must not be allowed to handle food.
- Employers should receive a written confirmation from a doctor that employee is fit for work after a period of illness

Pest Control

- An ongoing pest control programme must be in place to prevent infestation from insects and rodents. Pest control activities should be done in keeping with national regulations (e.g. by certified individuals, use of approved pesticides etc.)
- The building must be free from cracks
- Fly screens must be in place at windows and on doors
- Inspect all deliveries and reject any package found to contain evidence of pests
- Clean up spills promptly
- Inspect for signs of infestation

Garbage Disposal

- Adequate numbers of garbage containers should be strategically placed throughout the main production and eating areas.
- Garbage containers must be leak proof, water tight, easily cleanable, pest-proof and durable.
- These containers should be made of metal or approved hard plastic
- Containers must have tightly fitted lids and must be kept covered
- There must be sufficient number of containers to hold the amount of garbage that is created daily.
- Garbage must not be allowed to accumulate anywhere except in garbage containers
- Garbage must be removed from food preparation area as soon as possible and must be disposed of at intervals to prevent odour formation and attraction of pests.
- Garbage containers must be scrubbed, rinsed and sanitized daily

Manual Ware Washing

- Prepare equipment, cleaning agents and tools to be used in manual ware washing.
- Ensure that 3 compartment sink (or 3 separate containers) is clean and filled with water.
- Use approved sanitizer and detergent diluted and mixed according to manufacturer's instructions.
- Prepare and empty drying racks.
- Ensure that water is at the correct temperature.
- Scrape and pre rinse dishes. A brush or cloth may be used to remove any remaining soil. Pre-soaking may be used when food particles are not easily removed
- Wash in the first compartment: each piece of utensil must be washed separately in hot water 43–49°C (110–120°F).

- Rinse in the second compartment: using clear hot water temperature 49°C (120°F).
- Sanitize in third compartment: immerse in hot water 77°C (170°F) for 30 seconds or immerse in an approved sanitizing solution, that is, as directed by manufacturer's guidelines.
- Place to drain and allow to air dry. Do not towel dry as this may re-contaminate utensils. Do not touch food contact surfaces of sanitized utensils.
- Inspect and store utensils in a clean dust free enclosed area away from toilets, sewer lines, leaking pipes and other sources of contamination.

Floor & Equipment Cleaning and Sanitizing

- Use cleaning schedule to carry out cleaning and sanitizing.
- Spills must be wiped up promptly.
- Floors must be swept, scrubbed and wiped.
- Walls must be cleaned to remove grease, water and food particles.
- Counter areas must be cleaned before and after each meal.
- Storage areas must be kept in sanitary condition at all times.

The following tables below detail appropriate sanitation schedule and procedures for selected facility and equipment.

Cleaning Schedule

AREAS	When to clean				HOW TO CLEAN
	After use	Daily	Weekly	Monthly	
Bathroom		✓			Basins must be scoured, bowls brushed daily and sanitized. A deodorizer should be in place.
Wall		✓			Food contact areas and walls near to preparation and cooking area should be washed, rinsed and sanitized daily.
Ceiling Lights, Fans			✓		Use either wet or dry cleaning method, unplug power before cleaning fixtures.
Floors		✓			Remove soils, wash with hot soapy water, rinse, and sanitize. Spills should be wiped immediately. Clean and sanitize prior to closing for the day.
Dining Area Floor Table Chairs	✓ ✓	✓ ✓			Sweep after each meal. Wipe after each meal. Legs of chairs must be wiped as well.
Drains		✓			Use spray hose to flush, pour drain cleaner, scrub with brush and rinse with hot water. Pour spray sanitizer into drain. [Last to be cleaned daily] Use degreaser on schedule.
Cleaning Tools and Supplies					Wash mops, turn mop head up in the janitorial room. Scour mop wringer weekly. All washcloths should be properly washed, sanitized and put to dry.

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